

**Lafarge Alpena Plant –Alternate Fuels Procurement Plan
(B1477, 106-08, Received by AQD on January 28, 2015)**

A. Definitions

1. Clean wood

Clean wood is defined as leaf material, bark, grass, and wood in any form containing no paint, stain, or other types of coatings, and has not been treated with wood preservatives, including but not limited to, formaldehyde, arsenate (copper, chromium, and arsenic), creosote (phenols and cresols), or pentachlorophenol.

2. Plastics

Plastics are defined as non-chlorinated, non-halogenated, and containing 2.0 percent (20,000 mg/Kg) or less of chlorine or total halogens, as received by weight. These plastics are commonly referred to as resin code numbers 1, 2, 4, 5, 6, and 7. The plastics may contain paper cardboard, wood fibers, or other cellulosic materials, and may not contain polyvinyl chloride (PVC) or resin code number 3.

3. Shingles

Shingles are defined as shredded/chipped asphalt roofing shingle material that contains no asbestos and no appreciable amount of paint, stain, or other types of coatings.

4. Batch

A quantity of material contained in one storage unit (i.e., stockpile, barge, truckload, etc.) where no additional material is put into the storage unit after sampling. If additional material is added to a storage unit after sampling, a new batch has been created and must be analyzed and given a new identification number.

5. Source

A facility that processes alternate fuels of plastics, clean wood, and/or shingles.

6. Supplier

An entity with different ownership and/or address.

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- B. All plastics, clean wood, and shingles (as defined) must be acceptable for use as a fuel under federal and state regulations. A certificate of analysis must accompany each delivery and must be kept on file for a period of 5 years and made available to the AQD upon request.**

Each delivery from a supplier/source of plastics, clean wood, and shingles must be accompanied by a certificate of analysis, demonstrating the following:

1. Plastics are defined as non-chlorinated, non-halogenated, and containing 2.0 percent (20,000 mg/Kg) or less of chlorine or total halogens, as received by weight. .
2. Clean wood contains no paint, stain, coating and has not been treated with wood preservatives; and
3. Shingles contain no asbestos or coatings.

The documentation shall include supplier/source certification, unique identification number, date of delivery, sampling analysis, date the sampling analysis was performed, and analytical methods used. The analysis must be for the batch of plastics, clean wood, or shingles accepted for use as a fuel by the permittee. Separate deliveries may have identical documentation from the supplier/source if they are loaded from a unique batch from a single supplier/source. The delivery shall be rejected if this demonstration cannot be met.

- C. Sampling and analysis of plastics, clean wood, and shingles must be kept on file for a period of 5 years and made available to the AQD upon request.**

For each supplier/source of plastics, clean wood, or shingles; the permittee shall conduct monthly sampling and analysis of the material. Samples shall be taken at the time of delivery from the delivery vessel, prior to mixing with material in on-site storage, and labeled with the unique batch identification number. Sufficient material shall be collected to provide three samples, each of sufficient volume for the required analysis.

For each fuel, one of the three samples of the plastics, clean wood, and shingles; from each batch collected shall be submitted by the facility to an independent laboratory to verify the information provided on the supplier/source certificate of analysis for the batch and to verify the amounts of the following:

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1. Plastics

Antimony, Arsenic, Barium, Beryllium, Bromine, Cadmium, Chlorine, Chromium, Copper, Fluorine, Iodine, Lead, Manganese, Mercury, Nickel, Silver, Thallium, total Zinc, BTU content per pound, percent Sulfur, percent ash, and percent moisture.

2. Clean Wood

Antimony, Arsenic, Barium, Beryllium, Benzo-a-pyrene, Cadmium, Chromium, Copper, Cresols, Lead, Manganese, Mercury, Nickel, Pentachlorophenol, Phenol, Silver, Thallium, total Zinc, BTU content per pound, percent Sulfur, percent ash, and percent moisture.

3. Shingles

Arsenic, Asbestos, Barium, Beryllium, Cadmium, Chromium, Copper, Hexavalent Chromium, Lead, Manganese, Mercury, Nickel, Selenium, Silver, Zinc, BTU content per pound, percent Sulfur, percent ash, and percent moisture.

The following contaminants shall not be more than the maximum allowable level listed in the table below:

Contaminant	Maximum Allowable Level*
Arsenic	1,000 ppmw
Chromium	1,000 ppmw
Chlorine	2.0 percent
Lead	1,000 ppmw
Manganese	900 ppmw
Mercury	121 ppbw
Pentachlorophenol	0
Phenol	0
Cresols	0
Asbestos	0
*ppmw = parts per million, by weight	
*ppbw = parts per billion, by weight	

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After 12 consecutive monthly samples from the same supplier/source are analyzed and found to be acceptable, the permittee shall conduct sampling and analysis once each calendar quarter. If a supplier/source does not deliver in a given month, then no sampling or analysis is required, for that month.

Samples shall be maintained by the facility for one year and shall be made available to the AQD upon request.

Any independent laboratory used by the facility for sampling analyses shall develop a Quality Assurance Plan (QAP). Detailed in the QAP shall be the Quality Assurance/Quality Control (QA/QC) procedures, sample handling, storage, chain of custody procedures, analytical methods for all analyses, a description of the laboratory instrumentation, and the instrumental detection limits. The analytical methods used by the independent laboratory should be consistent with the methods used by the AQD. The facility shall maintain a copy of the approved QAP on site or at the corporate offices and be available for AQD inspection.

A record of all batches analyzed along with records of the analytical data from both the supplier/source and the permittee's independent laboratory for the same batch, shall be kept on file and made available to the AQD upon request.

In addition, Lafarge will conduct the following when qualifying a supplier:

- a. Visit and/or audit potential suppliers to determine if a supplier has fuel that meets Lafarge's requirements for material specifications and handling.
- b. Periodic visits will be scheduled to supplier facilities to assure that Lafarge standards are being met in fuel supply and handling.
- c. As new shipments of alternate fuels are received Lafarge will complete visual inspection of each load to determine if unacceptable materials are present. If there is any material that is unacceptable upon visual inspection Lafarge will reject and return load to supplier.

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D. Exceedances of Allowable Levels

The permittee shall take all appropriate actions described in Step 1 and Step 2 below to address an exceedence.

Step 1

If the laboratory analytical results reported under the sampling plan for plastics, clean wood, and shingles show that an allowable level has been exceeded, the permittee shall notify the AQD District Office orally within two business days after receiving these analytical results. The permittee shall submit a written report of the results within five business days after making the oral report.

Step 2

When an exceedence of an allowable level is identified the permittee shall:

- Notify the supplier that an exceedence has occurred.
- Provide copies of the laboratory analytical results to the supplier.
- Inform the supplier of the required increase in sampling frequency described below.
- Explain the requirement for discontinuing deliveries if a second exceedence occurs within six months.

Increase in Sampling Frequency: When an exceedence occurs, samples from three of the next six deliveries of plastics, clean wood, and/or shingles received from the supplier shall be collected and analyzed in accordance with the sampling plan contained in this Appendix. Thereafter, sampling shall continue in accordance with part C of this sampling plan.

Discontinuing Deliveries: If a second delivery of plastics, clean wood, and/or shingles from the same supplier/source has an exceedence within six months after the first exceedence, the facility shall immediately discontinue accepting deliveries from that supplier/source. The permittee shall notify the AQD District Office in writing, within ten business days, that deliveries from the supplier/source have been discontinued. Before the permittee resumes accepting deliveries of plastics, clean wood, and/or shingles from the same supplier/source, the permittee shall provide written information to the AQD, for review and approval, demonstrating the alternate fuel is in compliance with the conditions of this permit. If deliveries resume, the permittee shall sample and analyze the alternate fuel as outlined in part C of this sampling plan.